

## Research Article

# Digital Transformation of Listed Agricultural Companies in China: Practice, Performance, and Value Creation

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In the digital economy era, the deep integration of the digital economy and the real economy promotes high-quality economic development. The digital transformation of listed agricultural companies in China, which is in a critical period of transformation and upgrading, is an important driving force for achieving high-quality agricultural development. This article takes Xinjinnong as an example to analyze how the practice of digital transformation can improve corporate performance and achieve value creation. The analysis found that in the initial stage of digital transformation (that is, the informationization stage, the company realized financial sharing, the person in charge of the company called the company digitalization 1.0 stage), this paper try to reduce costs and increase benefits by digital transformation from aspect of each link of production and operation (production link, operation link, supply chain management link, etc.) due to the low level of digitalization, the impact of digitalization on corporate performance is limited. The chain management link has achieved cost reduction and efficiency enhancement, and has significantly improved performance. The impact of digitalization on performance in production and application links is not obvious. With the deepening of digital transformation, Xinjinnong will realize value creation in the entire industry chain of the aquaculture industry in the digital 2.0 era.

## 1. Introduction

In the digital economy era, the in-depth integration of the digital economy and the real economy is an important driving force to promote high-quality economic development. Digitization can increase corporate value through effective use of corporate information to effectively allocate corporate resources [1]; at the same time, after a company has built a digital system, it can interconnect all links from product design to after-sales through the digital system to achieve product innovation acceleration. At the same time grasp the market demand [2]. Enterprises realize digitalization and promote enterprise innovation activities through product innovation, process innovation, organizational innovation and business model innovation [3]. For example, Since 2008 Sany Heavy Industry Co., Ltd., as the Leading enterprises in China's construction machinery industry, has experienced three stages: prosperity, recession and recovery.

Sany has realized digital operation and digital supply chain management. Through the digital transformation, Sany successfully reduced its costs and increased its efficiency, finally realized value creating. The in-depth integration of digital economy and agricultural development in my country's agricultural enterprises, which are in a critical period of transformation and upgrading, is an important measure to accelerate the realization of agricultural modernization [4]. On May 16, 2019, the General Office of the Central Committee of the Communist Party of China and the State Council issued the "Digital Village Exhibition Strategic Outline," proposing that digital countryside is the application of networking, informatization and digitization in the economic and social development of agriculture and rural areas, as well as farmers' modern information skills The improved and endogenous agricultural and rural modernization development and transformation process is not only a strategic direction for rural revitalization, but also an

important content of building a digital China. One of the key tasks is to promote the digital transformation of agriculture. The number of Internet users in rural China is 255 million, and this number increased more than 30% over the 2015. During 13th Five-Year period, the scale of the Internet continues to expand, the application continues to deepen. The Internet has been integrated into all aspects of people's life, and has had an important impact on the law of economic operation and the model of social development [5].

Accelerate the promotion of the application of cloud computing, big data, Internet of Things, and artificial intelligence in agricultural production and management, and promote the comprehensive and in-depth integration of new-generation information technology with plantation, seed industry, animal husbandry, fishery, and agro-product processing industries to create scientific and technological agriculture, Smart agriculture, brand agriculture. Build smart farms (livestock) and promote precision agriculture (livestock) operations [6]. The application and development of the new generation of digital technology in agriculture will help restructure the agricultural industry chain, upgrade the agricultural value chain, deepen the integration of the agricultural industry, explore and innovate new agricultural models and new formats, and promote the development of agriculture to network, precision, and intelligence [7].

On the basis of expounding the basic understanding of digital transformation of agricultural enterprises, Starting from the practical understanding of the new Jinnong digital 1.0 era to the Digital 2.0 era, this paper discusses the impact of the digital transformation process of Chinese agricultural listed companies on enterprise performance, and we also try to provides a reference for the digital transformation of similar enterprises.

## 2. The Status Quo of Digital Transformation of Agricultural Listed Companies

The Information Center of the Ministry of Agriculture and Rural Affairs issued the "Evaluation Report on the Development Level of Digital Agriculture and Rural Areas in the Country in 2020" and pointed out that the digital level of agricultural production has risen from 18.6% in 2019 to 23.8%. Compared with the digital level of other industries, the level of digitalization of agricultural enterprises is low. However, in the development of agricultural enterprises led by agricultural listed companies, agricultural listed companies have already carried out digital transformation and upgrading in their respective fields.

There are many studies about Agricultural digital transformation, for example, Li Qixiu (2021) studied the basis, mode and future development trend of agricultural digitization from the background of 5 g Er [8]; Yin et al. [9] puts forward the realistic representation, influence mechanism and vehicle road of agricultural and rural digital transformation based on agricultural and rural digital transformation [9]; Qian [10] and Liu [11] proposed that the transformation of agricultural digitization needs to accelerate the construction of agricultural and rural big digital center, driven by technological innovation from the

perspective of digital agricultural transformation. Most of the studies which support the digital transformation of agriculture are How to carry out professional transformation in agricultural companies. The purpose of digital transformation is to improve enterprises' response to uncertainty, Improve the economic benefits of enterprises, So as to enhance their competitiveness. At present, there are relatively few studies on the performance of digital transformation of Chinese agricultural listed companies. In particular, there is less research on the performance of digital transformation of Chinese agricultural listed companies. Based on this, this paper choose xinjinnong as the study object because this company has completed the 1.0 era of digital transformation and is currently undergoing the transformation to Digital 2.0, Meet research needs.

*2.1. Digital Transformation of "Dayu Water Saving" Smart Water Conservancy.* Dayu Water Saving Group Co., Ltd. is a national high-tech enterprise. "Make agriculture smarter, make rural areas better, and make farmers happier" as the corporate mission; take "agricultural water-saving irrigation, rural sewage treatment, and farmers' safe drinking water" as the company's core business areas, with water network, information network, "Service Network" (referred to as "Three Networks of Agriculture, Rural Areas, Three Waters and Three Networks"), three networks integration technology and service platform, help modern agriculture development and development model of modern agriculture industry and finance integration. In August 2019, the company took water as the entrance and water saving as the starting point, relying on the new generation of digital technology to achieve solutions for precision irrigation, water and soil environment and information technology; in April 2021, Dayu Water Saving signed a strategic cooperation with Huawei The agreement relies on Dayu's water-saving expansion in the "three rural, three-water, three-network" market, and leverages Huawei's next-generation technological advantages in 5G, big data, cloud computing, artificial intelligence, and information communication to build a cloud base for smart water conservancy and water services. The aggregation of water conservancy and water affairs scenario applications and the realization of "digital scenarios, intelligent simulation, and precise decision-making" will help promote the company to accelerate the formation of a demonstration effect in the national agricultural, rural and intelligent water conservancy field, and drive the company's business upgrade and performance improvement.

*2.2. Digital Transformation of "Fubon Co., Ltd." Digital Technology and Planting Industry Integration.* Fubon innovates in a digital way to effectively open up the upper, middle, and lower reaches of the industrial chain. The digital smart supply chain + platform-based ecological services it builds not only connects the upstream and downstream of the enterprise, the enterprise, and the industry, but more importantly, the connection The individual and data within the enterprises on both sides are reconstructed to

reconstruct the business chain and industrial chain of traditional industries, to help enterprises reduce costs and increase efficiency, and accelerate industrial transformation and upgrading; at the same time, a new intelligent fertilizer distribution station + farmer model is created to provide farmers with a full range of Agricultural technology services.

In the digital agriculture industry, Fubon is in an important stage of transformation and upgrading. Under the guidance of national policies and the company's new-generation technology application, the digital agriculture business will become the company's new profit and value growth point.

*2.3. Digital Transformation of "China Information" Agricultural Integrated Service Platform.* "Shenzhou Information" takes rural government affairs as the entrance and the informatization processing of rural government affairs as the entry point. The industrial chain extends to the informatization of agriculture, rural areas and farmers, traceability of agricultural products, and large digital platforms for agricultural products. Research and develop smart agricultural projects internally, and cooperate with high-tech companies externally to build a smart management platform.

In addition to the above three listed agricultural companies that have been deployed earlier in the digital transformation of agriculture, "Dabeinong" is also engaged in the integration of digital technology and animal husbandry, and "Guanghong Holdings" is also promoting the overall scale and intensification of agricultural and rural areas. The layout of my country's high-efficiency agriculture has made positive attempts to advance to high-quality development and achieved corresponding benefits.

At present, the digital transformation of agricultural enterprises in my country is still in the layout stage, which is also a key stage of the industrial upgrading of agricultural enterprises. Most of the research on the digital transformation of agricultural enterprises is theoretical research on the path of how digitalization affects performance and value. This article takes the "Xinjinnong" represented by the digital transformation of agriculture and animal husbandry as a case to analyze the road of "New Jinnong" digital transformation and the impact of digital transformation on company performance.

### 3. Shenzhen New Jinnong Digital Transformation

*3.1. Overview of Shenzhen New Jinnong.* Shenzhen Xinjinnong is the abbreviation of Shenzhen Xinjinnong Technology Co., Ltd. The company was established in 1999 and landed on the capital market in February 2011. It is a modern technology-based listed company with three core businesses of breeding, feed and animal protection. . After more than 20 years of development, the company now has a national key agricultural industrialization leading enterprise, two national-level core breeding farms, five provincial-level agricultural leading enterprises, and six of the first batch of feed quality and safety management standards that have

passed the acceptance of the Ministry of Agriculture. Demonstration enterprise, an integrated enterprise in the pig breeding industry of seven national high-tech enterprises. In the breeding sector, with the "four modernizations" model + the "four good" goals leading the digital transformation of the company's new technology breeding business, it has successfully survived the impact of the "African Swine Fever" on the breeding industry in 2018 and the impact of the 2020 epidemic on the industry. The "Four Modernizations" model is a standardized, large-scale, intelligent, and ecological scientific breeding model; the "Four Goods" goal is to provide the market with high-quality pig products under the "Four Modernizations" scientific breeding model. Good planting, prevention, eating, and housing.

*3.2. Shenzhen Securities New Jinnong Digital Transformation.* SAP facilitates the digital transformation of Xinjinnong's agricultural and animal husbandry industry chain with industry-financial integration and transparent management. According to the person in charge of the company's corporate management department, Xinjinnong was successfully listed from 2011 to 2015. Xinjinnong's overall digitalization is very weak. Basically, it handles some related accounting systems manually, which is low in efficiency and poor in accuracy. 2016 to 2019 is the 1.0 era of Xinjinnong's digital transformation, and 2020 to the future will be the 2.0 era of Xinjinnong's digital transformation. The single-industry chain (SAP Business One on HANA) financial sharing platform built by Xinjinnong in 2016 was upgraded to a multi-industry, diversified (SAP S/4HANA) refined management platform after 4 years of use.

*3.2.1. Digital 1.0 Era.* From 2016 to 2019 is the era of New Jinnong Digital 1.0. The process from the establishment of the SAP B1 system to the deepened application of ERP as the core has gone through the digitalization from 0 to 1 in 2016, which consolidated the basic standardization and the preliminary process of combing. Completed, the digital concept, analysis and sharing in 2017, and finally the intensified application of ERP as the core in 2018 and 2019. Figure 1 describes the digital transformation process of Xinjinnong.

*3.2.2. Digital 2.0 Era.* In 2020, the company will carry out a comprehensive digital transformation to empower management innovation. The company has initially realized digital transformation. By opening up the entire industry chain, it simultaneously formulates feed formulas and production plans according to different stages of breeding. In this way, the numbers are transparent and the plan is good, thus ensuring the maximum economic benefits of the entire industry chain. Moreover, the integrated financial management platform can directly analyze the costs and benefits of the upstream and downstream of the entire industry chain, and guide the optimization and adjustment of the business based on the feedback information of the financial data, so as to realize the transformation and

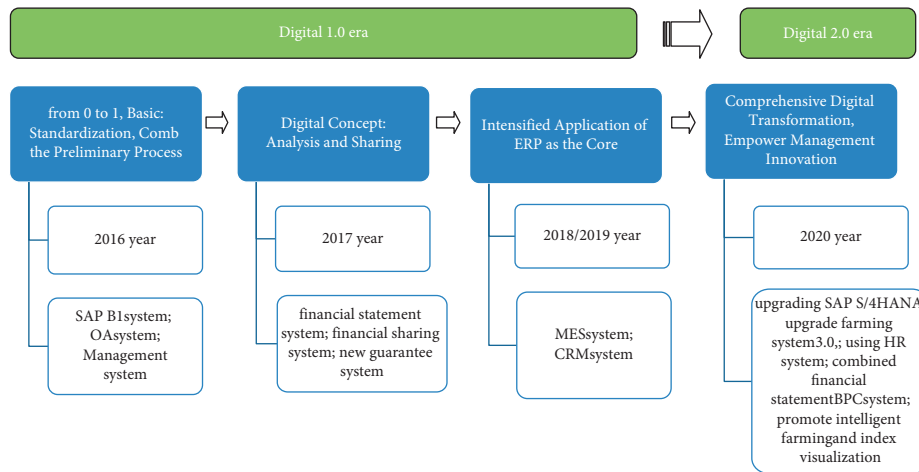


FIGURE 1: Digital transformation process of Xinjinnong (Source: CCID.com, Xu Peiyan).

transformation of the digital empowerment of the enterprise's business, and realize the business financial Converged and integrated digital transformation road. The specific practices of Xinjinnong in the company's digital transformation process are listed in.

In the digital 2.0 era, Xinjinnong will realize the goal of the construction and application of intelligent Internet of Things system, pig individual identification handheld terminal and digital management system. To achieve such a digital transformation, we need to focus on digital acquisition, data management, numerical analysis, and digital assets. The establishment of a technical and economic digital management platform in aspects such as industrialization and management decision-making to achieve digital transformation. Based on the technical and economic digital management platform, three major systems have been built based on production indicators, financial indicators, sales indicators, procurement indicators, market indicators and warehousing indicators to achieve digital transformation and upgrading. The relationship among the three major systems, indicators and platforms is shown in Figure 2. Describes the digital transformation process of Xinjinnong in digital 2.0.

#### 4. Xinjinnong's Digital Transformation and Enterprise Performance Analysis

##### 4.1. Cost Reduction and Efficiency Increase in All Links of Production and Operation

**4.1.1. Production Process.** Digital production intelligent manufacturing frees production personnel from repetitive work to focus on more valuable and beneficial work [12], and at the same time realizes the interconnection of production equipment through a digital platform, which reduces labor costs and equipment losses [13]. In the era of Digital 1.0, Xinjinnong was mainly financial digitization (Financial Shared Service Center), and the digitization of production was not completed. Therefore, the cost reduction and efficiency increase in the digital production process were not realized. Instead, as the company scale increased, related

indicators in the production process. It has not decreased, but increased. The specific data is shown in Table 1. The original value of fixed assets and the proportion of production personnel in the manufacturing process of Xinjinnong have increased significantly after 2015, especially the original value of fixed assets indicators have shown a stepwise pattern. The growth is mainly due to the fact that Xinjinnong has carried out several large-scale mergers after 2015 to realize the strategic layout of the entire industry chain of the aquaculture industry. However, compared with the substantial increase in the original value of fixed assets, the turnover rate of fixed assets does not have a corresponding proportion. Although there is a decline, the proportion of decline is much lower than the increase in the original value of fixed assets. It can be concluded that Xinjinnong's fixed assets will be optimized after 2015 to speed up the turnover of fixed assets. When the depreciation amount accounts for the proportion of operating income, it is found that this indicator continues to rise, reaching the highest level of 3.79 in 2019, and starting to decline in 2020. From the relevant indicators of the production link of Xinjinnong, it can be seen that Xinjinnong is in the era of digital 1.0. Digital transformation has not made a corresponding contribution to corporate performance. The main reason is that the new Jinnong still adopts traditional production methods in the digital 1.0 era.

Data source: The data in Tables 1–5 come from the 2011–2020 annual report of Xinjinnong. The indicators in the table refer to Wang Ziqing and Chen Jia. Digital transformation and value creation of enterprises-taking Sany Heavy Industry as an example.

**4.1.2. Operations.** If the company has carried out digital transformation in the operation link, according to theoretical analysis, the company should improve the turnover rate of related assets, business cycle, related management expenses and other indicators [14], reduce management costs and improve operating efficiency [10]. In the 1.0 era of the company's digital transformation, Xinjinnong is mainly financial digital transformation. In the company's operation

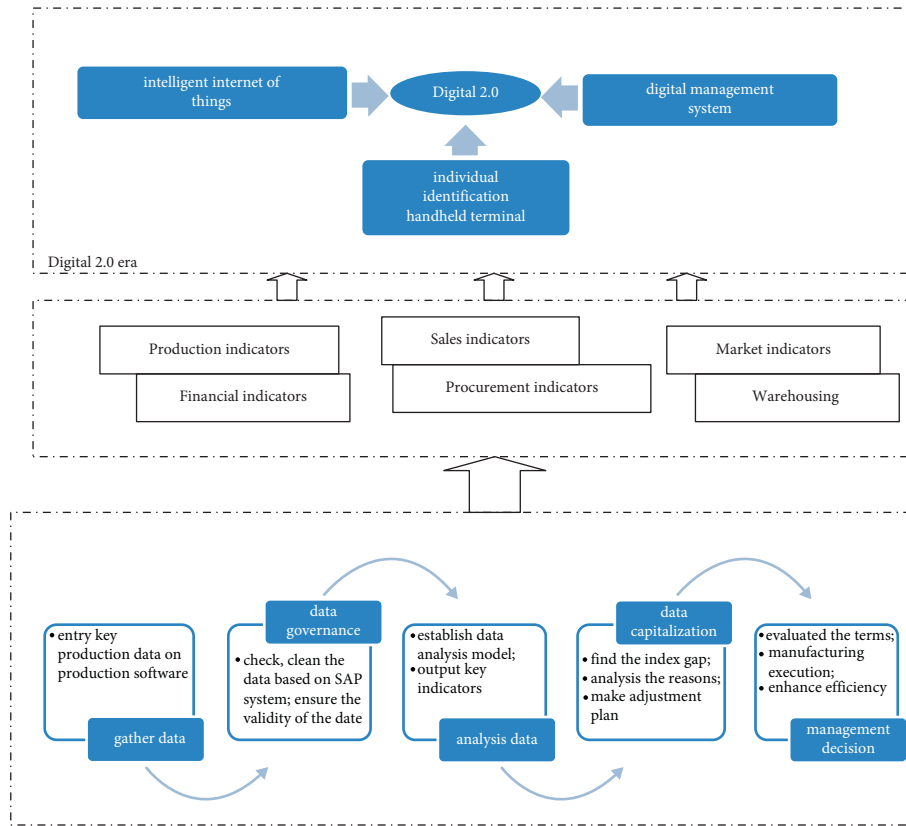


FIGURE 2: Digital transformation process of Xinjinnong in digital 2.0.

TABLE 1: Performance analysis of Xinjinnong’s production links.

year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Manufacturing worker rate (%)	23.87	27.83	27.84	34.25	34.15	39.24	40.91	52.36	52.37	57.64
Labor cost profit rate (%) (labor/profit)	4.04	4.47	4.98	5.61	5.16	7.28	8.73	10.16	11.34	9.54
Depreciation profit rate (%)	0.81	0.86	0.74	1.02	0.93	1.48	2.67	3.01	3.79	2.66
Plant assets of fixed assets (ten million)	10.00	10.78	18.22	25.39	32.21	80.39	90.07	94.07	130.65	182.52
Turnover of fixed assets	20.318	19.412	15.245	9.8849	9.3867	5.166	3.82297	3.3321	2.32817	2.81037

link, it is still the traditional operation model. According to the period from 2011 to 2020, the relevant indicators clearly show a phased change trend, as shown in Figure 3. According to the report, the first stage is from 2011 to 2015, the related indicators have not changed much, and are basically consistent with the company’s normal development level. Business diversification, on the one hand, is the company’s larger-scale merger business, especially the increase in the proportion of the main business of the breeding industry. The breeding industry of Xinjinnong is pig breeding, and the cycle of pig breeding is longer than that of feed processing. Due to the cycle, the number of inventory turnover days of New Jinnong in 2015 was significantly longer than before. Compared with the change in the management expense rate, although there has been an upward trend from 2016, it is less important than the expansion of the enterprise scale. The performance indicators of Xinjinnong in the operation link are shown in Table 2 shown. The financial performance of operation is shown in Figure 4.

**4.1.3. Supply Chain Management.** The digital transformation of enterprises in the supply chain is mainly to realize data sharing at the end of the supply chain, reduce non-value-added activities at the end of the supply chain, and realize the value creation of the entire industrial chain [15]. The digital transformation of Xinjinnong on the supply chain is mainly on the sales side, increasing online sales, greatly reducing the proportion of sales staff, and strengthening the management of accounts receivable, reducing the turnover days of accounts receivable and multiyear accounts receivable. The management of transfers can improve sales efficiency and increase company value. It can be found from Table 3 that the turnover days of accounts receivable reached a maximum of 39.31 days in 2019, and dropped to 15.61 days in 2020, which is basically the same as 2014, and the proportion of accounts receivable longer than 2 years remained basically the same before 2016, But after 2016, there have been relatively large fluctuations. In 2019, it reached the highest proportion of 58.69, and there was a significant drop in 2020. The short- and medium-term

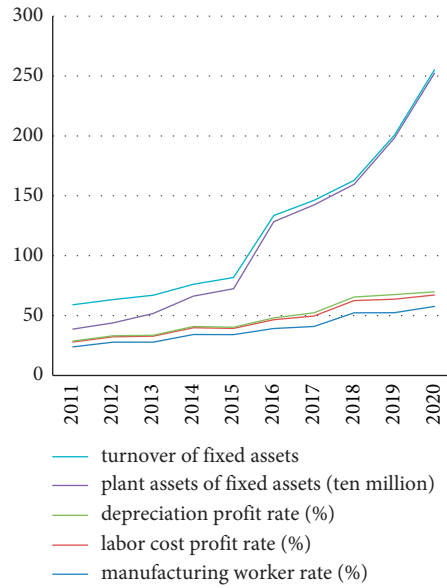


FIGURE 3: Financial performance analysis of production.

TABLE 2: Performance analysis of Xinjinnong’s operations.

year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Inventory turnover	30.8679	28.5588	30.7495	34.32597	25.2965	44.39374	56.92058	57.197	73.5882	83.05079
Business cycle	34.6993	32.2958	37.4263	51.62938	47.7555	70.1618	85.64266	95.2143	112.895	98.65848
Charge ratio (%)	3.9333	4.4622	5.50375	5.3814	5.0302	6.6136	8.2875	8.3118	9.0538	10.2152

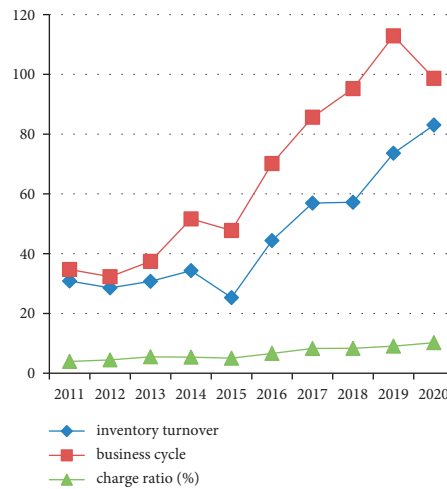


FIGURE 4: Financial performance of operation.

TABLE 3: Performance analysis of new Jinnong supply chain links.

year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Receivables turnover ratio	3.8314	3.73696	6.67678	17.3034	22.459	25.7681	28.7221	38.0174	39.3063	15.60769
1 year–2 year receivables (%)	2.6	5.67	2.67	4.02	4.56	8.55	7.16	11.45	13.08	24.38
Receivables over 2 year (%)	1.2	1.93	2.3	1.42	2.88	4.04	54.7	37.94	58.69	32.38
Bad debt reserve profit rate (%)	0.08	0.01	0.19	0.45	0.18	0.14	0.67	1.31	0.03	0.44
Sales (%)	44.87	40.97	41.65	30.4	27.33	23.33	25.88	21.76	18.97	10.4
Sales expense rate (%)	5.0485	4.661	5.0238	4.6246	3.8323	4.4221	4.6525	4.6929	3.9089	1.6607
Sales profit rate (million)	3.2782	3.4345	3.2837	4.8366	5.2076	4.1298	4.1994	5.4276	6.0454	12.4062

accounts receivable basically showed a slight upward trend. The proportion of customer service staff continued to decline, and as of 2020, it had dropped to 10.40, which was a 30.47 percentage point drop compared with the highest of 44.87 (2011). The main reason for the decline was that enterprises were engaged in sales of modern technology such as Internet+. With the application, the sales and customer service personnel have been greatly reduced, and the corresponding sales expense rate has also shown a downward trend, and the expense category has been reduced, so as to increase efficiency in the supply chain. The financial performance on supply chain management is shown in Figure 5.

**4.2. Realizing Value Creation Based on Cost Reduction and Efficiency Enhancement.** Xinjinnong is driven by the digital 1.0 era and intelligence (digital 2.0), per capita output value is an important measure of company value creation [16]. Due to the company's strategic implementation of the entire industry chain layout of the aquaculture industry, the total number of employees has increased year by year, reaching 3,150 in 2020. Compared with 1,010 in 2011, the number of employees has tripled. Per capita income has slightly changed, but in terms of the profit index created by the per capita for the company, it basically shows an increasing trend. In addition to the substantial impact of the company's main business number in 2017 and 2018, the African swine fever has shown an upward trend. The profit per capita was minus 110,300 yuan. In 2019, it achieved more than 86,500 per capita. The profit per capita in 2020 is 2.67 times that of 2013. Observation of the per capita salary index shows that it is showing a trend of increasing year by year, especially after 2016. At the same time, the company's per capita salary has shown a simultaneous increase, indicating that the company's production automation level has increased, and the per capita income generated by lean management has significantly increased, which creates more for employees value.

Specific data are listed in Table 4.

The digital transformation of enterprises is a process [17]. The digital transformation of Xinjinnong has experienced the 1.0 era of digital transformation of financial shared services (2016 to 2019) and the 2.0 era of digital transformation that began in 2020, and the 1.0 era of digital transformation of the company. The company achieves the purpose of reducing costs and increasing efficiency in the supply chain management link, and improves the company's operating performance. Judging from the various profit indicators in Table 5, Xinjinnong's operating income decreased due to the impact of African swine fever in 2018 and 2019, and showed a trend of increasing year by year. Especially in 2020, Xinjinnong's receivables reached 40.69. 100 million yuan to achieve strong growth after African swine fever. Return on net assets, net sales margin, and net sales margin appeared negative in 2018, but turned negative to positive in 2019, returning to normal levels in a short time, even after Affected by the new crown epidemic in 2020, Xinjinnong will basically maintain the level of 2019, and the digital transformation and upgrading of enterprises has

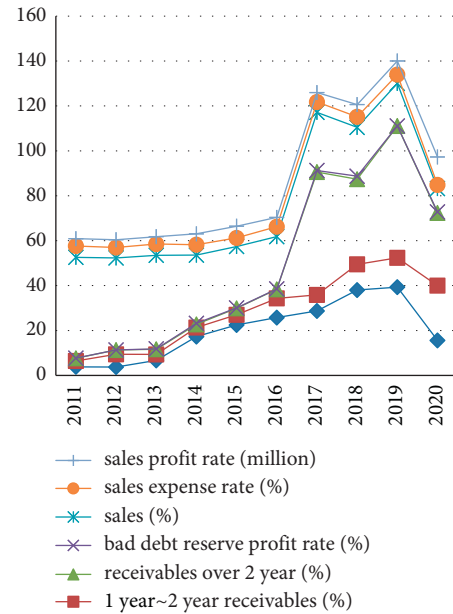


FIGURE 5: Financial performance on supply chain management.

minimized the negative impact of the new crown epidemic. While operating income has grown, the company's various profit indicators have also risen significantly, with good cost control and high earnings quality, indicating that the company's digital transformation has created value for shareholders. The Per capita output value analysis is shown in Figure 6 and the profitability analysis is shown in Figure 7.

### 5. Summary

From the perspective of the micromajor enterprises of market participants, digital transformation is a process. In the initial stage of transformation, the driving effect of digitalization on business performance is not obvious. As the maturity of digital transformation increases, digitalization will be realized in the entire value chain of enterprise production, operation and management. After the transformation, the cost reduction and efficiency increase of enterprises will be more obvious. Digital empowerment of all aspects of the enterprise, while reducing costs and increasing efficiency, strengthens the enterprise's response to internal and external uncertain risks [3]. This article analyzes the financial indicators of the new Jinnong digital transformation from the 1.0 era to the beginning of the 2.0 era in 2020, and concludes that the new Jinnong's digital transformation in the initial stage of digital transformation, the information phase (digital 1.0 stage), and the impact of digitization on corporate performance. Mainly in the supply chain links and per capita breakthrough level. Due to the low level of digitalization, the impact of digitalization on corporate performance is limited. The chain management link has achieved cost reduction and efficiency enhancement, and has significantly improved performance. The impact of digitalization on performance in production and application links is not obvious. With the deepening of digital transformation, Xinjinnong will realize value creation in the

TABLE 4: Analysis of per capita output value of Xinjinnong.

year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total employees (thousand)	1.014	1.257	1.455	1.352	1.76	2.867	2.817	2.371	2.093	3.154
per capita sales revenue (million) (business revenue/labor quantity)	1.47	1.40712	1.3676	1.47286	1.4232	0.9637	1.0867	1.1812	1.14668	1.2902
per capita profit (ten thousand) (profit//labor quantity)	6.7019	4.4151	2.9386	4.6298	6.1087	6.0783	3.7681	-11.03	8.6532	7.7783
per capita salary (ten thousand) (labor salary/labor quantity)	5.93948	6.2856	6.8148	8.2503	7.3412	7.0163	9.4922	11.999	13.0059	12.31

TABLE 5: Analysis of new Jinnong's profitability.

year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Business income (hundred million)	14.92	17.69	19.90	19.88	25.05	27.63	30.61	28.01	24.00	40.69
ROE (%)	11.62	6.87	5.21	7.58	8.65	9.65	5.55	-15.54	10.2	9.6
ROA (%)	9.21	5.68	4.15	7.89	8.41	7.34	5.24	-4.81	5.91	6.84
Net profit margin on sales (%)	3.95	3.14	2.15	3.15	4.29	6.31	3.47	-9.34	7.55	6.03
Gross profit margin of sales (%)	12.69	12.1	11.81	14.17	14.03	15.04	18.46	14.75	23.36	28.32

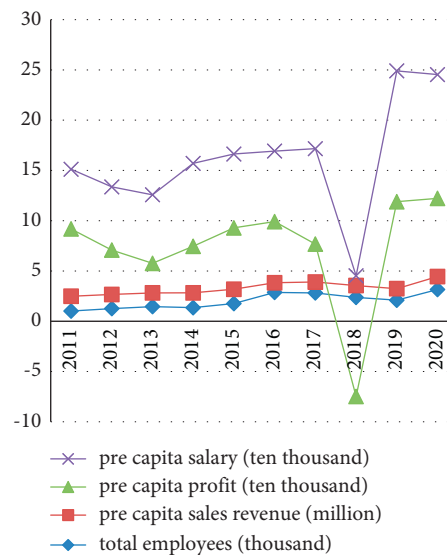


FIGURE 6: Pre capita output value analysis.

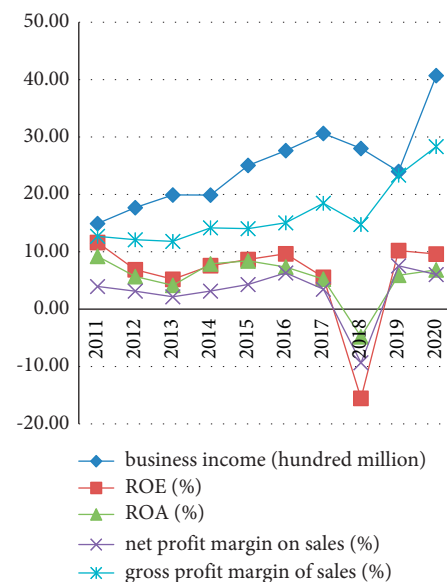


FIGURE 7: Profitability analysis.



entire industry chain of the aquaculture industry in the digital 2.0 era. As the maturity of digital transformation increases, companies will reduce costs and increase efficiency, create value, and increase corporate value in the entire industry chain of the aquaculture industry [18].

The digital transformation of agricultural enterprises is not just a handfuller, apart of the companies, a complex and systematic project. Research on the digital transformation of agricultural enterprises can further study the subdivided industries of agriculture, forestry, livestock and animal husbandry according to the characteristics of agricultural enterprises, at the same time, study how to promote their high-quality development.

### Data Availability

No data were used to support this study.

### Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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